

SEQUENCE LISTING

5 <110> Olivera, Baldomero M.  
McIntosh, J. Michael  
Yoshikami, Doju  
Cartier, G. Edward  
Luo, Siqin  
University of Utah Research Foundation

10 <120> Uses of Alpha-Conotoxin Peptides  
<130> Uses of Alpha-Conotoxins

15 <140>  
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<150> US 60/080,588  
<151> 1998-04-03

20 <150> US 60/070,153  
<151> 1997-12-31

<160> 13

25 <170> PatentIn Ver. 2.0

<210> 1  
<211> 17  
<212> PRT  
<213> Artificial Sequence

30 <220>  
<223> Description of Artificial Sequence:generic  
alpha-conotoxin sequence

35 <220>  
<221> PEPTIDE  
<222> (1)..(6)  
<223> Xaa at residue 1 is des-Xaa, Tyr, mono-iodo-Tyr or  
di-iodo-Tyr; Xaa at residue 2 is any amino acid;  
Xaa at residue 5 is any amino acid; Xaa at residue  
6 is any amino acid.

40

45 <220>  
<221> PEPTIDE  
<222> (8)..(12)  
<223> Xaa at residues 8, 10, 11 and 12 may be any amino  
acid; Xaa at residues 13, 14, 15 and 16 may be  
des-Xaa or any amino acid.

50 <400> 1  
Xaa Xaa Cys Cys Xaa Xaa Pro Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
1 5 10 15

55 Cys

60 <210> 2  
<211> 16  
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<213> Conus magus

<400> 2

Gly Cys Cys Ser Asn Pro Val Cys His Leu Glu His Ser Asn Leu Cys  
 1 5 10 15

5 <210> 3  
 <211> 17  
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10 <220>  
 <223> Description of Artificial Sequence:Tyr derivative  
 of C. magus MII

15 <400> 3  
 Tyr Gly Cys Cys Ser Asn Pro Val Cys His Leu Glu His Ser Asn Leu  
 1 5 10 15

Cys

20 <210> 4  
 <211> 16  
 <212> PRT  
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25 <220>  
 <223> Description of Artificial Sequence:FAT derivative  
 of C. magus MII

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 Gly Cys Cys Ser Asn Pro Val Cys Phe Ala Thr His Ser Asn Leu Cys  
 1 5 10 15

35 <210> 5  
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40 <400> 5  
 Gly Cys Cys Ser Tyr Pro Pro Cys Phe Ala Thr Asn Ser Asp Tyr Cys  
 1 5 10 15

45 <210> 6  
 <211> 17  
 <212> PRT  
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 <223> Description of Artificial Sequence:Tyr derivative  
 of C. aulicus AuIA

55 <400> 6  
 Tyr Gly Cys Cys Ser Tyr Pro Pro Cys Phe Ala Thr Asn Ser Asp Tyr  
 1 5 10 15

Cys

60 <210> 7  
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<212> PRT  
<213> Conus aulicus

5 <400> 7  
Gly Cys Cys Ser Tyr Pro Pro Cys Phe Ala Thr Asn Ser Asp Cys  
1 5 10 15

10 <210> 8  
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<212> PRT  
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15 <400> 8  
Gly Cys Cys Ser Tyr Pro Pro Cys Phe Ala Thr Asn Ser Gly Tyr Cys  
1 5 10 15

20 <210> 9  
<211> 16  
<212> PRT  
<213> Conus purpurascens

25 <400> 9  
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1 5 10 15

30 <210> 10  
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<223> Description of Artificial Sequence:A10L derivative  
of C. purpurascens PnIA

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1 5 10 15

45 <210> 11  
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<212> PRT  
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<223> Description of Artificial Sequence:N11S derivative  
of C. purpurascens PnIA

55 <400> 11  
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1 5 10 15

60 <210> 12  
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<213> Conus purpurascens

<400> 12  
Gly Cys Cys Ser Leu Pro Pro Cys Ala Leu Ser Asn Pro Asp Tyr Cys  
1 5 10 15

